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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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QUALCOMM, INC
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

KIM, KEVIN

ART UNIT PAPER NUMBER

2638

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,574	Applicant(s) TEAGUE ET AL.	
	Examiner Kevin Y. Kim	Art Unit 2638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-26, 28, 29, 31 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-26, 29 and 32 is/are allowed.
- 6) ☒ Claim(s) 19-21, 28, 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 11-17-2005 have been fully considered but they are not persuasive.

First of all, applicant correctly pointed out that the rejection of claims 19, 20, 28 and 31 was improper because a wrong section of 35 USC § 102 was relied on. The rejection should have made under 35 USC § 102 (e) instead of § 102 (b). Since the ground of rejection in this Action is changed to 35 USC § 102 (e), this Action is made non-final.

Now turning to the merits of the rejection, applicant argues that the reference fails to teach restricting the Rake finger movements. But the Smoylar patent clearly teaches that two fingers are not allowed closer than a predefined distance. See col. 11, lines 1-2. Applicant also argues that the reference fails to teach regenerating motion limits. At col. 10, lines 54-61, the Smoylar patent describes redefining finger blocks when one or more fingers move, resulting in regeneration of motion limits.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action of March 26, 2004.

Claim Rejections - 35 USC § 102

3. Claims 19, 20, 28 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Smolyar et al (US 6,314,130 previously cited).

Claims 19.

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Smolyar et al discloses a method of timing tracking a plurality of fingers in a Rake receiver, comprising

restricting each finger from tracking outside motion limits, see col. 8, lines 36-40, describing “ $1.5 T_c$ ” as a minimum separation between two fingers, see also col.9, lines 54-61 and col. 11, lines 1-2 and;

regenerating the motion limits for a first finger adjacent to a second finger when a timing tracking command is issued to the second finger. See col. 9, lines 28-30 and col. 10, lines 54-61. See Fig.1 showing direction metrics 1,2 where each finger movement causes the regeneration of the motion limits for its adjacent finger.

Claims 20, 28 and 31.

Smolyar et al discloses a method and apparatus of timing tracking a plurality of fingers, each finger having an advance limit and a retard limit (see col. 8, lines 36-40, describing “ $1.5 T_c$ ” as a minimum separation between two fingers), comprising;

advancing the retard limit of a first finger adjacent to and ahead of a second finger and the advance limit of a third finger adjacent to and behind the second finger when an advance command is delivered to the second finger, and

retarding the retard limit of the first finger and the advance limit of the third finger when a retard command is delivered to the second finger.

In other words, when the second finger is moved, the fingers on either side of the fingers moves in the same direction. See Fig. 2B, direction metric 10 and Fig.2C, direction

metric 27 where all the fingers move in a same direction when a finger, i.e., a middle finger, moves.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smolyar et al (US 6,314,130), as applied to claim 20 above, in view of La Rosa et al (US 6,078,611, previously cited).

Smolyar et al disclose all the subject matter claimed except for suppressing the advance and retard commands for the second finger when the commands would move the offset of the second finger outside its motion limits. La Rosa teaches that when the finger movement correction violates the time separation threshold, the proposed correction is disallowed since otherwise the benefit of path diversity would be lost. See col. 8, lines 13-24. Thus, it would have been obvious to one skilled in the art at the time the invention was made to suppressing the advance and retard commands for the second finger when the commands would move the offset

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of the second finger outside its motion limits, as taught by La Rosa, for the purpose of not losing the benefit of path diversity reception.

Allowable Subject Matter

6. Claims 22-26, 29 and 32 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KVK

**KEVIN KIM
PATENT EXAMINER**

K. Kim